g of glycerin and 100 mL of purified water. The resulting gel mixture is then incorporated into rectal delivery units, such as syringes, which are suitable for rectal administration.

Example 6f

Topical Gel Composition

To prepare a pharmaceutical topical gel composition, 100 mg of a compound of Formula (A) is mixed with 1.75 g of hydroxypropyl celluose, 10 mL of propylene glycol, 10 mL of isopropyl myristate and 100 mL of purified alcohol USP. The resulting gel mixture is then incorporated into containers, such as tubes, which are suitable for topical administration.

Example 6g

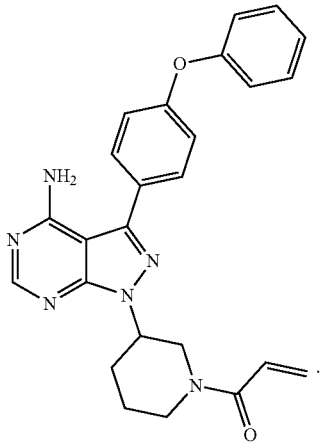
Ophthalmic Solution Composition

To prepare a pharmaceutical opthalmic solution composition, 100 mg of a compound of Formula (A) is mixed with 0.9 g of NaCl in 100 mL of purified water and filtered using a 0.2 micron filter. The resulting isotonic solution is then incorporated into ophthalmic delivery units, such as eye drop containers, which are suitable for ophthalmic administration.

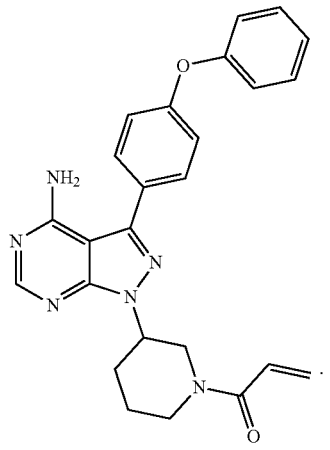
It is understood that the examples and embodiments described herein are for illustrative purposes only and that various modifications or changes in light thereof will be suggested to persons skilled in the art and are to be included within the spirit and purview of this application and scope of the appended claims. All publications, patents, and patent applications cited herein are hereby incorporated by reference in their entirety for all purposes.

What is claimed is:

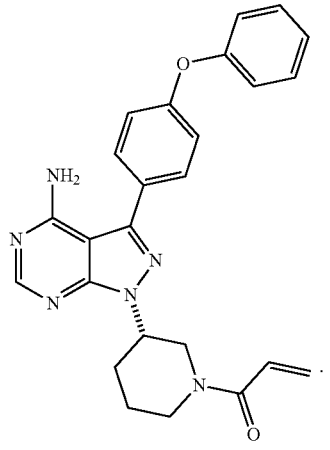
1. A compound having the structure:



2. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a compound having the structure:

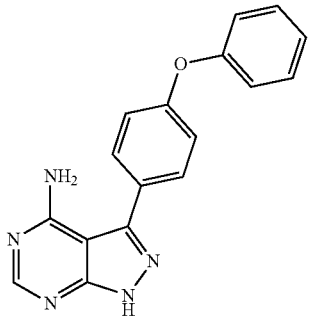


3. A compound having the structure:



4. A pharmaceutical composition comprising a compound of claim **3** and a pharmaceutically acceptable excipient.

5. A process for the preparation of (R)-tert-butyl 3-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)piperidine-1-carboxylate (intermediate 3, R-isomer) comprising coupling of intermediate 2 and (S)-tert-butyl 3-hydroxypiperidine-1-carboxylate:



Intermediate 2